

The implementation of e-commerce in a medium-sized Brazilian textile company: A case study

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value creation, sales strategy, e-
commerce, COVID_19.

Abstract— The textile sector is currently the second-largest employer in Brazil, corresponding to 1.5 million direct employees. Due to the high international competition from countries with different production conditions, the Brazilian textile industry has been going through a period of economic difficulty aggravated by the COVID pandemic. Case study and action research were the methodologies applied for this study. We analyzed the impact of one specific enterprise that implemented B2C in the textile sector. We found that changing the indirect sales channel to direct sales using the marketplace proved to be an effective strategy in improving the margins and the sale obtained, thus offering better profitability conditions and an exciting alternative to gain a competitive advantage and improve sales growth.

I. INTRODUCTION

The textile sector is of high importance in Brazil due to the intensive employment of labor which, in 2018, accounted for 1.5 million direct jobs and 8.0 million indirect ones. Of this number, 75% corresponds to female work. (Associação Brasileira da Indústria Têxtil e Confecção ABIT, 2020) This data source qualify the textile industry as the second largest employer in Brazil, only behind the food and beverage industry, resulting from the low mechanization and reduced use of technological resources throughout the production chain.

Given the context present, one of the strategies used by the textile sector is the reduction of the chain of intermediaries through the implementation of its own stores and e-commerce. According to (BAGATINI & LAIMER, 2019), online establishments grew 17% from 2013/18 annually, and this fact continues to occur during the COVID pandemics, with more intensity.

The present study intends to answer, from the methodology of the Action Research, to the following research question: “What is the effect of implementing online sales channels in a medium-sized company. This study address embroidery and is located in the textile conglomerate in the state of São Paulo, Brazil.

The general objective of this study was to analyze the impacts of direct-selling (B2C) and the changes in the relationship with customers, suppliers, and even in the company's internal management.

Creating value in a COVID context

Creating value is critical for companies to achieve sustainable growth, especially when they are going through an economic crisis and demonstrate slowness in overcoming it. The expansion of technology in the sales process could increase revenue and better relationships with the client. (Seki, O Impacto da Utilização de

Ferramentas Virtuais na Gestão de Pequenos Negócios, 2017)

Electronic commerce or e-commerce can be considered as an extension of traditional trade. It operates in a virtual environment of purchase, sales, exchange of products and services based on the support provided by computer equipment. (Teixeira, 2017) In addition, this form of commerce provides changes in business structures and improvement in processes, reducing costs and creating new opportunities. (ALBERTIN, 1999)

One of the most widespread e-commerce strategies today is the marketplace. According to (Hagiu, 2015), the marketplace is the sales format where the supplier sells directly to the final customer.

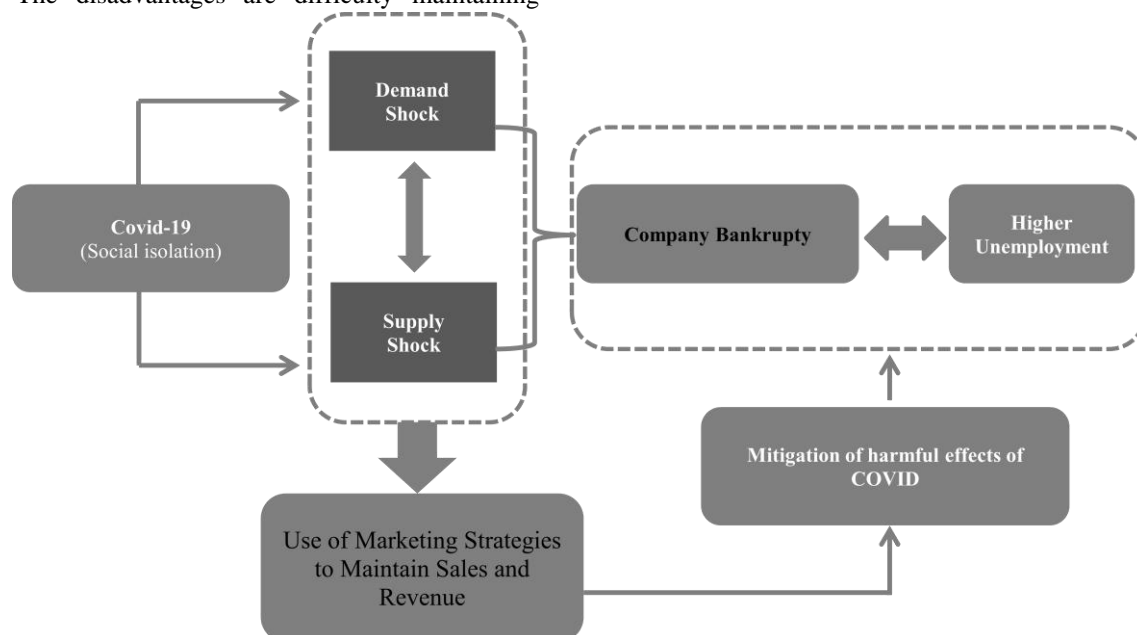
Marketplace works with the dynamics of a virtual mall; in this commercialization model, a company acts in creating and managing the platform and allows others to advertise and sell their products through the first. Some companies that execute this strategy in Brazil are B2W (owner of the Submarino, Americanas, and Shoptime brands) and the giant Amazon. The success of this mechanism is known since, in the year 2015, 45% of Amazon.com total sales originated from this strategy. Also, the Chinese JD.com reports annual growth of 40% in its sales through this channel. (Tian L. V., 2018)

Among the advantages of using the marketplace are greater brand awareness; reduced costs due to no need to invest in information technology (IT) in the creation and maintenance of a website; access to an expanded consumer market, and control over the definition of the final sales price of the product, allowing the supervision of the price strategy. The disadvantages are difficulty maintaining

customers who work in the B2B (business-to-business) format, logistics costs, and changes in the production structure to keep up with a new sales dynamic.

The figure below summarizes some changes that occurred with COVID 19 in the Brazilian economy and its impacts, pointed below:

- 1) Social isolation creates barriers to the traditional way to trade based on sellers with high social contact, which must be substituted for direct sales using marketplaces or even the company site;
- 2) Demand shock, in a first moment the disease caused a substantial fall in the consumer demand; at this moment, consumers stopped all the acquisitions of textile products – this phenomenon was more intense in the 1st semester of 2020;
- 3) Supply shock, this shock occurred in the 2nd semester of 2020 when companies find difficult with their supplies;
- 4) Company bankruptcy, with these two shocks, many companies suffered bankruptcy during the second semester of 2020;
- 5) The challenge to companies survival was to develop new marketing strategies to mitigate the harmful effects of COVID ;
- 6) At the end of the 2021 first quarter year, the Brazilian economy had the highest unemployment rate, 14,6%, with 14,8 million people of formal unemployment . (Silveira & Carvalho, 2021)



Source: Based on (de Rezende, Marcelino, & Miyaji, 2020)

The sales function in the company has been changing due to the evolution of marketing processes and the consumer's purchasing behavior (Castro, 2017). If in the 1960s it represented only a production function, as companies knew that what was produced would be sold, today this function becomes much more complex and requires companies to make and sell what customers want and need. In this context, the concept of Relationship Marketing is highlighted, which seeks to guide strategies towards three pillars: customer orientation, coordination and integration of marketing activities, and focus on creating value for stakeholders. (CLARO, D. P., 2006).

In the Brazilian textile industry, the companies sell their products using resellers. However, with the COVID pandemics, the development of new sales channels was essential for the enterprise's survival and must be incorporated into the company's business strategy. This action played an important role in expanding sales using electronic commerce and social media. This new channel could be considered essential for the company's recovery.

There will be a strategic change when companies sell directly to consumers (B2C). This will imply strategic choices to be conducted. The enterprise needs to create value by dealing directly with consumers' choices and tastes and the new product demands generated by the electronic markets, such as higher price competition.

Table 1 presents some comparisons between these different marketing channels

Business to Business (B2B)	Business to Consumer (B2C)
A more intense and lasting relationship	Shorter and less intense relationships
Demand from subsequent customers	Demand-driven by choices, emotions, and tastes
Buyer-seller relationship with more significant predominance and recurrence	Buyer-seller relationship with less recurrence
More specialized customer	Less specialized customer

Source: Based on (Coda & Castro, 2019)

The decision process about which strategy to prioritize or how to work on them simultaneously is essential within a Strategic and one Marketing Plan due to the particularities and distinct target audiences that each platform presents. Therefore, understanding this theme and reorganizing sales processes is a fundamental part of a sustainable transition of the sales model in a company. Still, this transition

requires knowledge and interaction with digital channels and modern sales management software.

Use of SaaS tools by Medium and Small Businesses

One of the main barriers to entry into e-commerce is the costs of building, managing, and maintaining an IT infrastructure that demands time from managers in addition to relevant financial investments. Because of this, a viable alternative in adopting these processes is a software as a Service (SaaS), that is, the purchase or lease of online modules allocated in the cloud, of online sales and management platforms.

Due to the low need for investment, since these solutions are allocated in the cloud, fixed costs in hardware, software, and IT maintenance are avoided, in addition to the possibility of quick deployment of resources, making SaaS the main alternative to small and medium-sized enterprises (SMES). Therefore, the maxim of cloud computing, use what you need and pay for what you use is valid. However, as a negative aspect of this technology, there is reduced control over the security of customer data since management is not under the company's domain who hires the service. (Mladenow, Fuchs, Dohmen, & Strauss, 2012)

The Brazilian textile industry and the textile cluster in São Paulo

2020 was one of the most challenging for the segment, requiring adaptation of the production structure, sales channels, and the product portfolio, including items such as aprons, masks, coats, and other personal protective equipment. According to Pimentel, president of the Brazilian Textile and Apparel Industry Association, the sector suffered a strong retraction in the first two quarters, showing signs of recovery from the fourth quarter of 2020. (Associação Brasileira da Indústria Têxtil e Confecção ABIT, 2020)

As for the industry's future, the encouragement that developed countries have given to automation, robotization, and intensive use of the internet in production signal the increase in complexity of industry in the coming years. It begins with adopting the principles of industry 4.0 and sustainable growth parity with the Sustainable Development Goals (SDGs) of the Nations Units and with the climate agenda. The textile complex has not escaped this trend, although it is still restricted to a small and specific set of countries with the ability to invest in capital goods.

In the Brazilian textile and clothing industry, the growth of productivity compared with salaries has been considered an obstacle to the development of competitiveness. In the

period 2004/2014, there was an increase in wages not followed by productivity. (Silveira B. F., 2017)

As noticed in sectorial analyses, the observation of the increase in the wage curve concerning the stagnation of productivity (both in value (R\$) and in quantity (ton)) shows the low production efficiency. The association of this effect with the performance of the workforce is not correct. The businesses in this sector have difficulties adapting to the new international competition requirements, like more integration between suppliers and industry with new technologies linked to the industry 4.0 movement. (Silveira B. F., 2017)

This fact occurs both in adapting products to these markets and investing in technologies and devices that improve the efficiency of manufacturing, innovation, and sales processes. Some of the solutions that can change this landscape are professionalization of management, investments in information technology, new sales channels, and the modernization of the productivity structure with a view to changes and new Industry 4.0 concepts.

Electronic Commerce and Marketplace

Value creation is critical for companies to achieve sustainable growth, especially when going through a severe economic crisis and demonstrating slowness in overcoming it. The expansion of technology in the process is proven to be a revenue-boosting and better-relationship resource with the client. (Seki, O Impacto da Utilização de Ferramentas Virtuais na Gestão de Pequenos Negócios, 2017)

E-commerce can be considered as an extension of traditional commerce by operating in a virtual environment of buying, selling, exchanging products and services based on the support provided by computer equipment. (Teixeira T. , 2017). In addition, this form of commerce provides changes in business structures and improvements in processes, resulting in cost reduction and new opportunities. (ALBERTIN, 1999)

The marketplace is one of the most widespread e-commerce strategies and the marketplace is the sales format where the supplier sells to the end customer . (HAGIU & WRIGHT, 2015)

Still, for (WANG & ARCHER, 2007), electronic marketplaces are where buyers and sellers conduct transactions through electronic means. Acting as a virtual mall, a company operates in creating and managing the platform and allows others to advertise and sell their products first.

Among the large companies that use the marketplace in Brazil are B2W, which owns the Submarino, Americanas,

Shoptime brands, and the American Amazon. The success of this mechanism is known since, in 2015, 45% of total Amazon.com sales used this strategy. Chinese company JD.com reported 40% annual sales growth using this method. (Tian L. V., 2018)

II. MATERIALS AND METHOD

One company located in a textile cluster in São Paulo State, Brazil, was analyzed. The investigations adopted action research because one author actively participated in the company decisions during the period. Additionally, to collect more information, interviews were conducted with the leading directors of the company.

The city where the case occurred is located in a textile cluster in São Paulo state.

Embroidery emerged in the city in the late 1940s as an alternative to agricultural crises and unemployment. In the beginning, it had an extremely artisanal character and adopted intensive employment of female labor. Since 1974, when occurred the first exposition of the town textile products, small enterprises gained proportion, invested in new machinery, and in the "brand" of the municipality allowed, in 2003, in a context of available state financing lines that provided investments and expansions, the most remarkable increase experienced in this segment in Ibitinga. (FLORIAN & DE LORENZO, 2008)

The action research methodology refers to initiatives that seek to improve practice from the oscillation between acting in the practical field and the systematic study of its variables. This analysis method follows the logic of planning an action, implementing it, describing and monitoring the results, and, finally, evaluating its strengths and weaknesses. From this dynamic, it is possible to propose conclusions based on evidence and not just on the individual's subjectivity. (Tripp, 2005)

The data collection occurred from March 2020 until April 2021. This period to collect the data was critical because it portrays the period of maximum pandemic restrictions until Brazil's economic flexibility measures were adopted in 2021 (when the vaccination against COVID starts to get more regular between the population).

III. RESULTS

The company's sales process adopted two main strategies: indirect sales (B2B) and direct sales using e-commerce (B2C). In the first case, the target audiences are sales representatives and retailers, which concentrate most sales and have priority access to superior quality products and higher added value.

Advertising selected products develop the second sales process on online sales platforms known as marketplaces and on the website company's own. Due to the characteristics of this form of sale, the company prioritizes the advertisement of products with more competitive prices and more significant investment in design.

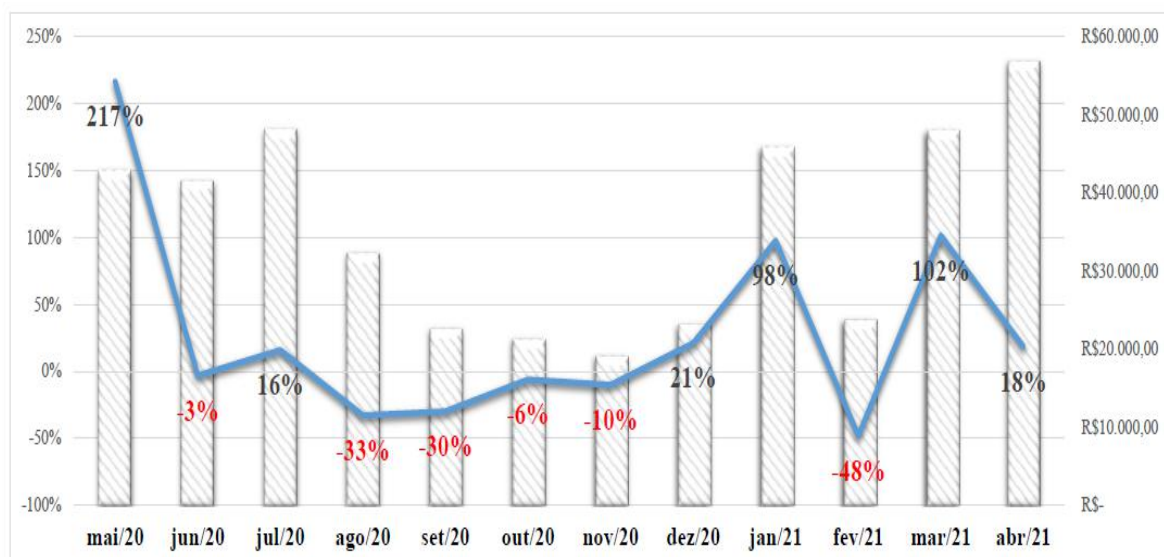
The shift to online sales resulted from the pandemic and the consequent trade closing as a significant driving factor. Internally, there was a lot of resistance to change the sales model, but with the pandemic lockdown, switching becomes a pivotal point to the enterprise's survival.

The table presents the leading market places company's products and a list of the fee charged individually for the intermediation of the described sales process. Each online sales platform was in descending order of representation in total online sales. In addition, the percentage value that each platform charges on the value of the product sold. Such fees are necessary when pricing, positioning, and

evaluating which products will be included in the online sales strategy.

Brazilian Marketplace	Commission Expenses (%)
Magazine Luiza	16
Dafiti	17
Olist	19
B2W	16
Madeira Madeira	20
Capital Décor	15

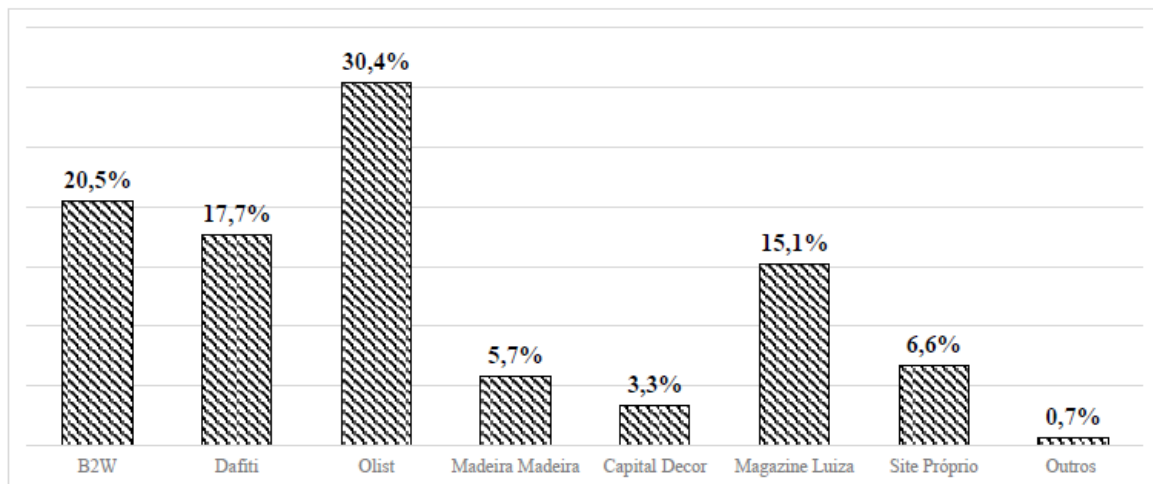
The graph below presents the e-commerce percentual sales evolution during the period analyzed (in local money). In the first six months, we can detect the substantial sales fall resulting from the COVID pandemic. After, we can notice one sales recovery yet with intense fluctuation due to the return of the traditional sales channels.



Fonte: (Casaborda, 2021)

Source: Data obtained with the company

The following figure shows the relative contribution (%) of each marketplace considering physical sales volumes.



Fonte: (Casaborda, 2021)

Source: Data obtained with the company

The marketplace channel added gross margin value to the company products compared with the traditional commercialization process (B2B), and we can notice this in the table below.

Product	Added Margin (e-commerce)
Blanket set	38%
Bed covers	26%
Cushion cover	14%
Duvet	40%

Source: Data obtained with the company

We evaluated the company strategy using the two sales channels: marketplace(B2C) and traditional (B2B) distributors. We conducted some interviews with the company directors and constructed one SWOT matrix based on their opinions.

Strengths	Weakness
The versatility of sales channels	Few workers dealing with online sales
A good relationship with retailers and distributors	Own site generates small sales
Agility to adapt to the pandemics	Dependence from marketplaces
Opportunities	Threats
Consumer expansion with a higher sales coverage	The emergence of conflicts between sales and distributors
Higher sales margins in the	Higher competition in prices

marketplace	
More contact with clients	The role played by e-commerce in the company strategy

IV. CONCLUSION

We started by asking the effects of implementing online sales channels in a medium-sized company. We can answer that three main domain are impacted : the financial, organizational, and customer relationship impact.

When evaluating the financial aspect, the data demonstrate a favorable and encouraging result of the adoption of e-commerce. During the most challenging times in the economy in 2020 and 2021, online sales revenue grew. In this sense, it is worth highlighting the increase in sales margin obtained with the adoption of the marketplace, which ranged from 14% to 40% among the five best-selling products. This fact demonstrates that e-commerce is a tool to increase sales and is also an opportunity for the company to improve its margins and gain greater profits.

E-commerce also means winning new customers. Finally, online sales promote a reduction in the company's need for cash since it is possible to receive payment for the sale in a shorter period than traditional channels. Thus, from a financial point of view, online sales are an instrument that promotes improvement in sales prices and payment terms.

Analyzing the owners' evaluation is favorable to e-commerce but divided as to its impacts. On the other hand, partners fear the effects that online sales can have on traditional sales channels, especially if there is no careful selection strategy of products. In this way, since there are opportunities to grow with online sales. The company's

partners must discuss the future of its sales and develop a strategic plan that contemplates this new reality, establishing objectives and indicators that can measure their performance.

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